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# BULLETIN of the MENNINGER CLINIC

Vol. 10, No. 5 September, 1946

## Contents:

**The Sense of Well Being and Its Relation to Clinical Improvement.** *By* O. Spurgeon English, M.D..... 137

**Psychotherapy of a Phobia in a Pilot.** *By* Milton L. Miller, M.D..... 145

**Amnesia with Spontaneous Recovery: A Case Report.** *By* Capt. K. R. Eissler, M.C. and Capt. Jacob Siegel, M.C..... 154

**Some Problems in Narcolepsy, With a Case Report.** *By* Nathan Roth, M.D..... 160

**Book Notices**..... 171

Issued bi-monthly by the Menninger Foundation, Topeka, Kansas
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Topeka
Kansas

BULLETIN of the
MENNINGER CLINIC

VOLUME 10 SEPTEMBER, 1946 NUMBER 5

# THE SENSE OF WELL BEING AND ITS RELATION TO CLINICAL IMPROVEMENT*

By O. SPURGEON ENGLISH, M.D.†

Every psychoanalyst who thinks about his results soon begins to wonder and speculate upon the factors which bring about an easy cure in some cases, a slow one in others, and finally, in some, little or no improvement after many hours of work. The goal of the treatment, or, in other words, what should make the patient well, was defined by Freud as the making conscious of the unconscious—removal of infantile amnesia—or the overcoming of the resistance.

These are "telegrammatic" descriptions of what takes place technically in analysis. To understand what actually makes a neurotic person "well," that is, to achieve a reasonably continuous sense of well being, combined with social efficiency, we should study further what contributes to giving the average non-neurotic human a sense of well being and a reasonable degree of social efficiency.

There is a type of case which can achieve this through one or several gratifying libidinal attachments. True, these may be unconstructive attachments such as indolent or socially useless companions, series of amorous adventures, dilletantish hobbies rather than capabilities used in constructive activity. Or the patient may have difficulty in accepting responsibility and social usefulness but may enjoy the therapeutic relationship because of its gratification of dependency needs. If he can endure frustration, his libidinal attachments can be redirected.

However, there is another type of case in which the libidinal attachments are all joyless, and even after long periods of treatment, such a patient will still insist that no one or nothing gives him any sense of pleasure. As one patient put it, "I never knew how to live until I came into psychoanalytic treatment. But having learned what I might enjoy, I can't develop any feeling for it."

Michael Balint[1] says, apropos of this:

* Presented at a Staff Seminar of The Menninger Foundation, Topeka, Kansas March 13, 1946.

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"There are people who cannot give up demanding ever fresh compensation from the world for all the wrong ever done them, who know, indeed, that such behaviour is obsessional, and at the present time quite unreal—simply a transference, but nevertheless, cannot give it up, who want only to be loved and are not able to give love. On a few occasions, though not often, I have come to this point with patients, and have not been able to bring them further. These isolated cases, which, incidentally, showed considerable improvement, but which I was not able to cure, forced me to recognize the limits of my therapeutic powers. With my present technique, I can cure only such people as in the course of the analytic work can acquire the ability to attempt to begin to love anew. How these others are to be helped, I do not at present see. But I do not believe that we need let ourselves be defeated by the constitutional factors. Ferenczi used always to say that as long as a patient is willing to continue treatment, a way must be found to help him."

## Help to the Ego

Freud[2], in his article on "Analysis Terminable and Interminable" says, "No doubt it is desirable to shorten analytic treatment, but we shall achieve our therapeutic purpose only when we can give a greater measure of help to the ego." Now the ego's great function is that of synthesis—of reorganizing its impulses and integrating them into the demands of reality. It can do its best work when comfortable and in a state of well being which comes about through love. It can accept the id impulses and unite them with reality demands in the most harmonious way.

If we study the psychoanalytic writing for the past twenty-five years, which is bound to reveal the therapeutic attitude of analysts, we see clearly a division (not too sharp, to be sure, but nevertheless there) in the attitude toward therapy. This attitude has had definite bearing on what Freud refers to as giving "a greater measure of help to the ego." Some emphasize, as Balint points out, "structural considerations", while others, notably Ferenczi and his followers, have given more emphasis to the "loving object relations."

DeForest[3] has stated this more pointedly as follows:

"An emotional relationship between analyst and patient must be allowed to form and must be constantly maintained. This is first initiated by relieving the patient's anxiety by encouraging discussion of the analyst, discussion of the patient's most patent characteristics, and discussion of their mutual relation; and it is continued by maintaining a changing and highly charged situation between them, primarily by the use of dialogue rather than by the usual passive explanation and interpretations of the teacher-pupil relation. During this dialogue the analyst should, when the occasion arises, express his own natural feelings to the patient's response. This serves to draw out his own natural feelings. Such dramatic interplay must in no way be artificially induced, nor should any element of insin-

cerity or inappropriateness enter into it. It must arise spontaneously and naturally.

"In continuing the drama, all is grist that comes to the mill, such as the analyst's eliciting criticism of his own personality, the attitude of friendly nearness to the patient, which makes unnecessary such artificial precautions as distance from the analytical couch or the furniture placed between analyst and patient, and the allowance of such freedom as the acceptance of tokens of the patient's esteem and affection, meeting of the analyst and the patient outside of the clinical hour. The more natural and fearless the relationship, the more helpful it is to the patient. All that creates the atmosphere of parent and child being intimately together helps to maintain the dynamic relation that Ferenczi considered necessary."

Later in her article, when she considers objections to Ferenczi's technique, DeForest says,

"To use the counter-transference as a technical tool, as one uses dreams, transference, association of ideas, and the behaviour of the patient, seems to many analysts exceedingly dangerous. Much of this anxiety has to do with the analyst's fear of his own impulses, his intuitional weakness, and his lack of self-knowledge. In so far as this is true, it points to the need for further and deeper analysis for the analyst, so that he may strictly and thoroughly know himself and his limitations. But in addition to this, there is often among analysts a preference for the teacher-pupil relation, a didactic and distant attitude toward the patient, rather than the tender, parental attitude. The teacher relation always allows the analyst to keep himself apart from the patient, to divulge just enough of his own personality to control the patient's confidence in him, to remain strong and self-assured in the eyes of himself and his patient, and to give help to the patient as a beneficial gift. The basis of this kind of treatment seems to be anxiety as evidenced in the patient's awe of the analyst. The patient learns because he must, and the hypnotic tie that binds him to the analyst may in the end be more unbreakable than the tie of tender devotion.

"Certainly, this dynamic type of analysis is more dangerous in unskilled hands than is the more intellectual and didactic type. The analyst, like the patient, tends to seek refuge in mental concepts and to function therapeutically on a mental level. They do this as a protection, for they fear to participate in an emotional drama. Undoubtedly, they thereby obtain results. But they could not approach more closely the kernel of the neurosis than by using the emotional language of the unconscious, if they attempted to work on its own dramatic level. Would they not be more likely to eradicate the neurosis and then to assist in the maturing of the individual if they dealt with him on an instinctive and a feeling basis?"

Such technique as DeForest suggests would surely promise to give what Freud suggested as a measure of help to the ego and yet Freud alluded to Ferenczi's experiments in active techniques as having been carried out "alas, in vain." The passage of time and the added experience of the

analysts in various situations do not seem to indicate that Ferenczi's experiments were in vain.

## Infancy

The observations of workers with infants have a bearing on the problem of enhancing the ego's power to function. Margaret Ribble[4] says, "His (the baby's) first sense of security, of pleasure satisfaction and success is closely linked with his mouth activity. Sucking usually reaches the maximum intensity about the fourth month of life, and, if it has been fully and agreeably exercised up to this time, begins to diminish spontaneously about this time when the baby begins to vocalize, to bite, and to grasp with its hands. Most important to the infant himself is the pleasure value of sucking. The mouth activity relieves the tension and establishes relationship with the mother in an important way. Thus the budding emotional and social feelings, as well as early feeling of self, are connected with oral activity. . . .

"But she (the mother) knows, and close chronological study of these progressive reactions indicates, that through the medium of the mother's person and the delicate assistance that she gives, elaborate functional associations are being built up in the baby's brain. Babies who do not have consistent mothering are definitely less well equipped and do not seem to understand in later life such simple matters as loving and being loved."

We see Ferenczi in 1920 appreciating the emotional need of the patient who has undergone infancy deprivations and trying to meet his need in the transference situation. Twenty years later, we see studies like those of Dr. Ribble, which substantiate the needs for sensuous oral relations with the mothers which enhance the sense of well being and facilitate introjection. Then, in the speeded up treatment necessitated by World War II, we see a chemical (the barbiturates) introduced intravenously to facilitate the synthetic functions of the ego. This seems to be accomplished by the increased sense of well being produced by the chemical action on the hypothalamus and the thalamus.

## Chemical Help

Freed[5], in a yet unpublished paper dealing with the use of barbiturates in civilian neuroses, says,

"The primary affective change produced by the specific action of the barbiturates on the hypothalamus, and possibly on the thalamus, is usually that of euphoria. The frequent comment is 'I feel good.' This may be preceded by the discharge of other emotions such as hostility or guilt. These can be considered affective outbursts which are of therapeutic value

in releasing repressed emotions. The relatively constant background state of euphoria, however, is of particular interest to the author. It is used to facilitate the psychodynamic processes of introjection and identification. These are possibly the earliest forms of affective relation to another person, corresponding to the earliest cannibalistic and the narcissistic stage of the ego. The patient regresses to an early oral stage of the ego, and the analyst is incorporated as a good object, probably because of the pleasure-toned affective state."

## Ego Depletion

To be helped to feel good in all possible ways is necessary because the various frustrations, dangers, and unsatisfied needs during combat weaken the ego structure. Grinker and Speigel[6] say, "The soldier's living conditions on the battlefield afford a minimum of instinctual gratification. Both dependent and libidinal needs must go begging, and the ego must endure the *strain* maintained by the unsatisfied needs. Repeated narrow escapes from injury or death mock the ego's attempt to feel invulnerable; undermining its confidence until it becomes convinced that the next time will be the last."

They offer a neurophysiological explanation for this syndrome of ego depletion:

"In the severe anxiety states the physiological processes in the diencephalon seem to persist as a continual neural excitation. The stimuli are no longer present but the reactions persist with violent exacerbations due to mild external stimuli; or sympathetic charges may break through spontaneously. It is as if the diencephalic waves of neural energy continued beating in close circuits of internuncial neurons maintaining excitation for weeks, or months. It has been shown experimentally that the hypothalamus acts as a condenser, discharging repeated bursts of excitation which influence the cerebral cortex long after the cessation of the original stimulus." Translating this into psychological terms, they state, "through the artificial intervention of the drug the intensity of the reaction has been diminished; the pressure upon the ego is decreased. Accordingly, the potential ego span is widened. However, such an increase in the ego capacity remains potential, rather than actual, until the active intervention of the therapist is brought into play." Outlining the procedures of the therapist, they say, "Support and gratification of the patient's weakened and regressed ego by means of tenderness and attentive interest, and furthering of identification with the therapist's strength."

Here we see the utilization of a drug to enhance the object-relations which Balint spoke of in 1937. Do these things give any clue for either shorter or more effective psychotherapy, or both? It seems important that Grinker and Speigel[6], writing on war neuroses have attempted to postulate and correlate what happens physiologically with what happens psychologically. The tired business man or housewife may at the end of

the day have a similar ego depletion, which is cured by a nap or a temporary change of scenery, a cup of tea, or a cocktail. What does the oral (chemical) intake, the visceral intake, or the nap have to do with the hypothalamic, the thalamic, or the subcortical area? This is certainly something that we need to know more about. Perhaps we are on the eve of realizing the chemical aid to the solution of the neuroses which Freud, long ago, envisioned.

This chemical help, however, will doubtless have its limits of aid. Furthermore, it will, differing from insulin shock treatment, have to contribute to the sense of well being, the euphoria, in order to facilitate introjection of good objects either with or without regression.

## Emotional Satisfaction

This still leaves much to be done with the transference and counter-transference phenomenon. And if we pursue this subject very far we come up against the popular prejudice against love and sensuousness. We are indebted to Dr. Karl Menninger[8] for bringing within sharper focus the therapeutic value of love, in his book entitled *Love Against Hate*. Nevertheless, the public still can see the emotional display only as weak or dangerously erotic in character. The men in service, who under pentothal cried, sought, and were not denied physical contact, were of the same sex as their psychiatrist and were sick men brought in in a crisis during patriotic service. Any widespread utilization of a technique of transference or counter-transference help which really met the needs of the patient, assuming him to realize its values and to utilize them, might be ever so helpful, but misunderstood and criticized by the public.

Therefore, to state a partial absurdity, but nevertheless, necessary to pose the problem, we could ask if it is necessary for psychoanalysts to stop their work of ego rehabilitation in order to educate the parents to give their children the optimum emotional satisfaction. If they have failed to do so, they should at least be understanding when the psychotherapist attempts to repair the results of this parental neglect at a later date in the child's life. Of course, such a procedure is not feasible, but such an idea seems to be helpful to show us where we stand. This leaves us to consider how much more resourceful we can be in making the psychic structure more pliable and receptive (with chemicals or hypnosis). Can we also be resourceful in bringing as much as possible into the patient's life, when he is receptive, to serve as pleasant memories neutralizing the traumatic ones of childhood? If recreational and occupational therapy help so many relatively easily, there must be a way to reach the seemingly completely uninspired. For some who have been indifferent to crafts, art may be

more sensuously satisfying. The beneficial effect of a satisfying love affair is well known. The removal from home to a sanitarium or other environment where more attractive scenery, a change in food, the kind administrations of new people, new faces, perhaps baths and massage to the skin may have their advantages even if the effect is temporary.

Too often this type of treatment was carried out for the neurotic without psychotherapy, and the phenomenon was comparable to the observation of Grinker and Speigel[6], as follows, "If a patient with a severely regressed anxiety state is given pentothal, and nothing more is done, he will sleep for a few hours, to awaken with no change in his clinical state; the potential increase in his ego capacity remains undeveloped, like an unplanted seed, and nothing happens. The activity of the therapist is vital to the success of the treatment. He must make contact between the partially restored ego and the anxiety situation."

In such a case "thalamic euphoria" had been created, but this was not enhanced by any psychotherapy which made contact between the partially restored ego and the anxiety situation, and no good introjections were made.

So, we seem to have in our analytic therapeutic movement forward, a philosophical progression which we see as follows: following Freud's concept of our psychic structure, there have been those who worked more distantly and intellectually to produce psychic structural alteration with emotional change a secondary consideration in their efforts, while others put emotional change first and the work of structural alteration was always in the service of producing emotional change.

Ribble and others who have attempted to isolate the nature and causes of these primary affects, have shown that the love of the mother and her appreciation of the need for sensual pleasure in initiating the affective tone of well being does a great deal, not only to favor introjection, but also to provide optimum brain (emotional-neural) conditions for establishing the rhythyms of these organs and organ systems under the control of the autonomic nervous system. She has not, however, attempted to isolate or describe what happens to the child neurologically or neurophysiologically. This much needed attempt was made by Grinker and Speigel.

Many have been dissatisfied with the analyst's preoccupation with the psychic super-structures of man without trying to link this with some part of the soma in a more tangible way. Following Grinker's lead, we would postulate that *the hypothalamus must act as a condenser not only for traumatic neural excitations brought about through a pleasurable nursing experience, but also as a condenser for any pleasant sensuous affectionate phenomena which follow the earlier nursing experience. These bombard the cortex with pleasant excitation eliciting pleasant rather than distressing*

*phantasies. If their quantity and quality are maximum, the individual can stand great traumata before breaking down with a neurosis.*

There is a pressing demand for the emotional needs of man to be made evident as a necessity—a necessity for psychic and psychosomatic health. We need to see more mention of the psychic needs of man in parallel with his somatic demands, and they must be expressed tangibly.

(1) **Wheat → bread → stomach → digestion → assimilation → life (somatic)**

(2) **{Love, Affection, Chemicals, Hypnosis} → {Optimum sensuous satisfaction} → {Hypothalamus and Thalamus} → {sense of well being enhancing introjection of good images and memories} → life (psychic)**

When we try to be consistent about man's optimum sensuous needs, we shall have to combat our widespread sense of sin and guilt. But if we take emotional needs out of the class of luxuries and put them in the class of necessities for good neuro-physiological functioning, so that a sense of psychic well being and healthy somatic rhythms can occur with their resultant beneficial effect on human welfare and health, we shall be helping mankind and also making our therapeutic task easier. Our psychoanalytic-therapeutic philosophy seems to be moving in this direction.

## BIBLIOGRAPHY


1. Balint, Michael: The Final Goal of Psychoanalytic Treatment. *International Journal of Psycho-Analysis*, Vol. 17, 1936.
2. Freud, Sigmund: Analysis Terminable and Interminable. *International Journal of Psycho-Analysis*, Vol. 18, 1937.
3. DeForest, Izette: The therapeutic Technique of Sandor Ferenczi. *International Journal of Psycho-Analysis*, Vol. 23, 1942.
4. Ribble, Margaret A.: *The Rights of Infants*. New York. Columbia University Press, 1943.
5. Freed, Herbert: Use of Narco synthesis in Selected Cases. Read before the Philadelphia Psychoanalytic Society, January 1946. (As yet unpublished.)
6. Grinker, Roy R. and Speigel, John P.: *War Neuroses*. Philadelphia, Blakiston and Company, 1945.
7. Grinker, Roy R. and Speigel, John P.: *Men Under Stress*. Philadelphia, Blakiston Press, 1945.
8. Menninger, Karl: *Love Against Hate*. New York, Harcourt Brace and Company, 1942.

# PSYCHOTHERAPY OF A PHOBIA IN A PILOT

By MILTON L. MILLER, M.D.*

Psychiatrists in military service, if in a position to do psychotherapy, had to apply dynamic methods in as brief time as possible. The following case report is of some interest because it represents the resolution of a phobia that had its inception in combat; with treatment it cleared up in two weeks. It was possible, at the time this patient was treated, to see him an hour a day during the brief period of treatment.

A B-25 pilot whom we shall call Arthur was admitted to a convalescent center with symptoms of anxiety, constant fidgeting and inability to relax. He was a tall youth, quite intelligent. He spoke rapidly, moved about in his chair uneasily, and looked around him a good deal as if looking for an exit. He tried to minimize his complaints, but admitted a disturbing phobia which began to develop after about thirty missions. He felt very uneasy when the seat in his plane would not move back, one day, and he was afraid he could not get out if necessary. After forty missions he was sent to a rest camp and then he went back and finished his missions. In a large European city, on his way back, he got stuck in an elevator and became very panicky. Subsequently, on the boat, in his room below deck, he felt hemmed in and afraid. Back in the United States, he felt uncomfortable in automobiles and could not remain inside movie theatres. On his way to the convalescent hospital he suffered from his claustrophobia in the Pullman and had to keep reassuring himself he could get out. When his wife was with him, he always felt much better. He had never had any similar fears up to the time of the thirtieth mission.

He told the examining psychiatrist that on his fourth mission a room mate was shot down in front of him but he did not feel that this disturbed him too severely.

When he was a lad of thirteen, he said, his father was killed in an automobile accident. Their family consisted of four: one older sister, a brother near Arthur's age, in the army, and a younger sister. He could not recall any other incidents of his early life that might have anything to do with his present nervousness, and said he was not fearful when he was a youngster, although he did bite his nails.

Because of the persistence of his symptoms and his inability to recall anything disturbing, he was interviewed while under the influence of sodium pentothal. He talked mainly of raids from his base in Italy. On his first raid, pilots of two planes ahead of Arthur were shot down—Hal

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and Dick. When Hal's plane was hit, Dick was circling around him. Arthur slowed down as did the others, and was told by the tail gunner that Hal's plane hit the water and blew up. Dick was shot down by two Messerschmidts and landed on the water. Three months later the bombardier of one of these planes 'walked home' and said that Hal and Dick and some of the others were O.K. These events evidently had no effect on Arthur's symptoms, and therefore were not of key significance.

## Onset of Phobia

Then he talked of another raid near Rome when the only three flak bursts in the sky hit the bombardier and nearly hit Arthur himself. Flak hit the armor in the seat instead of Arthur, who happened to be leaning over, and hit the navigator in the arm. Arthur said he put sulfa on the navigator's arm, and, while discussing this, he burst into tears.

"Why are you crying?" he was asked.

He jumped up angrily and exclaimed, "I'm not crying. I never cry. I only cried once in my life—when my father died. I don't like to see anybody else cry, either." Then he added, "I wonder why I feel so strongly about it. I suppose that I really was very much afraid overseas and never wanted anyone to know it. Actually, I flew two missions when I had severe pain. It turned out to be appendicitis—but I didn't say anything about it."

"Why not?"

"I guess to be sure they didn't think I was a sissy or afraid."

Then the patient talked of the death of another friend, Mack. This was really the event that set off his symptoms. On this raid, Mack was flying in the patient's place, since Arthur's tail gunner had accidentally shot the tail off Arthur's plane and he had to drop out of formation and eventually return home. As Arthur was trying to hold his own plane steady, although it was shaking badly, he was told by his gunner that Mack's plane was hit by enemy flak and that Mack and the co-pilot were struggling to bring the plane out of a long spiral. With a profound feeling of guilt he said he should have been in Mack's place or have shown him somehow how to avoid flak.

It was several missions after this, the patient said, that he found his seat jammed as he was taking off, and developed marked fear of missions. He couldn't find things in the plane, fumbled, and was confused. On the next mission he asked to be grounded because of fear, and because of a strong feeling that he must not endanger his crew.

By this time the effect of the sodium pentothal was almost entirely worn off and the patient, who had been lying down, was now asked to sit up. The material he had just talked about was reviewed with him,

especially Mack's death and the onset of the phobia. He began to talk about the things that happened to him the night before. The landlady where he was living with his wife, near the convalescent hospital, had asked him, "Are they teaching you to do things with your hands?" He resented that. He said, "I don't want people to think I'm crazy. But I can't go down in an elevator unless someone is with me. And if it is crowded or if I'm pushed to the back, I have to get off and walk down."

"What does the crowded elevator remind you of?"

"I suppose the fellows in the plane."

"Yes?"

"But I'm going to get over this, don't you think so?"

"Yes, I do."

On the next day, talking again about these things, he stressed his need to have his wife with him, in order to feel more secure. He said he had been an accountant and had been married just a few months before volunteering for combat crew. He then began to talk again about his father's death—how, at the age of fourteen, he had heard of his father's death in an automobile accident through the conversation of neighbors, but he had pretended not to hear, and had gone through a whole day without admitting to himself it was true. Everyone felt very badly. But his mother said little about it. She and the patient both worked in offices, and were good pals.

About his father, he said that he was indulgent but was frequently away on long trips. He recalled how his father showed him how to box and fish. But then he added that he thought his father drank too much and he blocked on discussing this. He talked about his mother and said he had never seen her cry except once when she suddenly burst into tears and couldn't stop. He said the older sister was married and away from home and the younger sister was spoiled, but he felt very close to his younger brother.

### Abreaction of Traumatic Event

The next day, sodium pentothal was again administered and Arthur was told: "You are taking off from the base at ————. What's happening?"

"It's a wet day," he said. "A fellow is crashing. Pieces of him scattered for a mile!" Then he talked of Mack, again. On that raid, he repeated, his own gunner's gun got out of control and damaged the tail of the plane. Arthur was forced to turn and head for home, pursued by fighters, but he evaded them through clouds. He reached home. Later the group returned and said Mack had been shot down, and they seemed to question the motive for Arthur's return to the base. Arthur felt very guilty but for no legitimate reason. Mack had taken his place in formation. Arthur

said if he had been there he would not have been flying in that exact spot and then he would not have been hurt, nor would Mack have been killed either.

He told again how the others described Mack's disaster to him. Mack went into a long spin after being hit over the target and along with his co-pilot was seen fighting the controls in the cockpit as he was going down.

During the deeper stage of the pentothal narcosis, Arthur cried and kept calling to Mack as though he were actually in Mack's place: "Give the right engine more throttle, push on the left rudder," and he made appropriate movements with his arms. He talked about Mack's wife and how on the night before Mack was shot down Mack had confided in him about his wife and how he had hoped to get back to her soon. Then Arthur was tearful again and said, "Those bastards will pay for it," as though he were talking to Mack personally and promising him that he would be avenged.

When Arthur became more completely awake, this material which was so full of emotion was reviewed with him. He said, "When I heard about Mack I couldn't sleep. After that I dreamed the same dream a lot—I could see Mack struggling in his seat on the plane, going down. I think, now, that my own seat phobia is connected with Mack's death. It all centers around Mack."

The following explanation was then given to him: He had identified himself with Mack, and that was why he was afraid of the seat that jammed and he made this identification with Mack because of the guilt he felt about Mack's death. But actually there was no reason to feel guilty. He had to return to the base from that mission because of the tail of his plane being damaged and it was just pure accident that Mack had taken his place in the formation.

### Improvement in Symptoms

The next day Arthur said he felt better and that now he could ride on elevators even if they were crowded. He went to a movie the night before, 'Gung Ho', a war picture, and he had no difficulty even though it showed two men with claustrophobia in a submarine.

Once more all the circumstances of Mack's death were reviewed with him. He admitted that he often had dreamed of himself in Mack's position, struggling in a plane without controls, going down in a spiral. For months, he said, he felt very tense, bit his nails, etc. These dreams persisted until a few days after he reached home.

It was pointed out to him, again, how he identified himself with Mack out of strong guilt feelings but he had no real basis for this guilt.

"I felt certain I'd get it next, in just the same way."

"Was there anything more about Mack? Anything in your relationship with Mack that you've tried to forget?"

Arthur then talked of Mack's first mission as a first pilot. Arthur was co-pilot on this 'milk run'. Near the target, in a cloud, Mack pulled out of formation to the left and above. Arthur said he felt that he, himself, would have continued to fly in formation because usually he can see enough to see where the other planes are. Finally Mack got in formation on the way home. At that point, Arthur asked to take over the plane and did so.

"You had some criticism of Mack?"

"On that mission Mack was 'big dog'"—Then Arthur caught himself, and laughed. He explained that 'big dog' is the term for first pilot. "I wonder why I laughed". . ."I guess I always thought Mack considered himself a big shot."

"Then you did have some critical feelings about Mack?"

With a very sad expression on his face, Arthur ignored the question and again talked of Mack's death.

It was pointed out to him that he had a critical feeling, but that it was followed immediately by guilt feelings, in which Arthur identified himself with his dead comrade.

Arthur then brightened up and talked about how, after his appendectomy, he went swimming in shallow water near their base, while Mack was out on a raft swimming and diving. He said, "Mack was a good swimmer but so am I". . ."Because of my operation, Mack was a dozen missions ahead of me, and in order to catch up with him I offered myself for every possible mission in spite of the flight surgeon's warning that I was overdoing it. I used to go to the board that recorded the number of missions of each man, to see how many missions they had, but I always looked particularly at Mack's score. Mack's name came right after mine, alphabetically."

Arthur reminisced again about the night before Mack's death. He and Mack had gone to a movie. Mack said, "I'll soon be on my way home. Only seven more missions." Arthur felt very envious—Mack was ahead of him.

Arthur completed several missions after Mack's death and was very much afraid on these. He was offered the position of first pilot and leader of the element, but he told the commanding officer he just couldn't take it.

"Do you see the connection?" the therapist asked.

"I do now. But then all I knew was that I'd sure get hit—I see now that it was because of these feelings."

"You couldn't accept the position you wanted, because of your strong competitive feelings and your guilt feeling about Mack, and all you real-

ized consciously was that you were afraid you'd be killed just as Mack was, especially if you did become first pilot."

"Yes. You know, another time, at a different base, I was offered the position of first pilot again and couldn't accept it. Then that day when the seat jammed I began to feel so afraid."

The next day, when seen again, Arthur said he felt so much better, he could now ride in elevators, go to movies, and even sit in the balcony without having to be on the aisle. He said he felt a little tired and depressed last night, partly because he had wanted to go to the movies at the hospital but his wife had invited guests and they went in to town. Before going to bed he thought of many things: about Mack's death which he did not dwell upon very long; and about a mission after Mack's death.

On this mission, he was flying with the Colonel as co-pilot and as they came over the target in the second element the flak ceased and the Colonel told them it would be easy. They saw P-38's engaging some fighters and as they passed the target the flak resumed.

"You now seem to be able to think about missions which were easy and successful and this is a good sign."

Arthur smiled, and began to talk about how he had tried to handle the problem of flying before he came to the hospital. He had planned to try to get a position as a training instructor in a training field where he could fly alone and master the plane.

"Perhaps this recalling the easy mission with the Colonel also is a reflection of your feeling that you are getting some help with this problem here," he was told.

## Childhood Predisposition

Then Arthur began to talk again about his father's death and how he became his mother's confidant, and tried to help the other children get an education. He became an accountant because the job was available, but disliked it.

He said that the night they learned of his father's death he simply pushed the idea out of his mind and went to sleep and wouldn't believe it. When he finally learned definitely from his mother that his father was dead, he said, "That means I can't go to college, doesn't it?"

After confessing this, he asked the therapist if that meant he was extremely selfish. Reassurance was given to him. He then said his father was a salesman and never went to college, but Arthur wanted to go to college and become a professional man.

"You wanted to exceed your father's achievements. You really were competitive toward him. And at the same time you had this strong affection for him."

"Yes, I see that."

"After Mack's death, you had similar feelings. You were sensitive to just such an accident."

He thought about this for a moment, and then he told how his father used to help him when he was home. Occasionally he would get up at 4:30 on a Sunday and help Arthur deliver his papers and they would have breakfast together somewhere. He was indulgent; for instance, he gave Arthur an automobile. "Of course, I think I was spoiled, to some degree," Arthur admitted. "But I wanted to be independent. I liked to do things on my own. As a pilot going overseas I felt far behind the others because I had had less hours of instruction and I constantly tried to make it up. I was aggressive about it and tried hard."

"Try out those situations you have been so afraid of. You know the emotional background of them now. There's no reason why you should not be rid of these fears now and get well."

### Transference Interpreted

The next day Arthur came in and said he had been quite angry and even felt like throwing a book out of the window, but restrained himself. He said he had wanted to go to town to buy clothes, instead of coming to see the psychiatrist. He also said that last night he was discussing the doctors with the other patients, and he told them that at first he wasn't sure he liked the therapist, but he did at the second interview.

"Evidently you are protesting about something—wanting to be independent. Perhaps you feel dominated in this therapeutic situation?"

"Overseas in a similar situation I blew my top, and really did throw a book. But most often I'd walk outside until I cooled off"...."Once a friend of mine called me a sissy. And once when I was learning night flying the instructor put me on my own very early and said, 'Don't be a sissy about it.' That made me very angry. I went on my own, and made bumpy landings—but I kept at it. In primary training I was very sore at an instructor who nagged me—he never directly said I was a sissy, but I interpreted it that way. After I got angry, the instructor was pleased, and we were good friends."

"You must feel that in coming for these treatments you're too submissive. You're telling me about how you disliked other similar situations and protested about them. Do you think that goes back to any relationship with your father?"

"That reminds me. When I was eight years old, my father used to teach me to box, and once he accidently hit me on the nose and it bled. I got furious and hit him back. He always used to say when he was teaching me how to box or do things, 'Now don't be a sissy'."

"You were urged by your father to box and do masculine things, for a young boy, perhaps beyond your capacity. Sometimes perhaps you would have preferred to dodge such situations and be protected by your father. It seemed a kind of weakness to you, to want his protection. Now it's the same way in the therapeutic situation: you feel it is a kind of weakness to come to the psychiatrist and you protest and want to show you're as much a man as anyone else around."

Arthur then mentioned an episode when he was ten or eleven, when a boy dared him to jump from the roof of a garage to a chicken shed. He was afraid but tried to do it, stumbled and fell, knocking out his wind. Then he returned to the subject of how his father always tried to make him "a man." He taught him to drive very early, when he was eleven. Before that, he used to sit on his father's lap and steer the car. His father once wrote him in a letter, "Always try to be a man," and Arthur never forgot that.

Then Arthur recalled how his father had an automobile accident when Arthur was about eleven, and was hit in the chest with a steering wheel. He was in the hospital for some time and after that was never quite the same; he would become very confused at times, while driving.

It was now possible to discuss with Arthur the entire trend of his fears about accidents related to getting stuck in the seat of a plane while flying it, or automobile accidents, and the other facets of his phobia. He realized for the first time that it was natural for him to have mixed feelings toward his father, particularly since his father had definite weaknesses (later Arthur had learned that he drank very heavily; and now for the first time Arthur felt able to talk about these positive and negative feelings in regard to his father and to other men, such as Mack).

The next day Arthur came in full of thoughts and questions about resuming his flying duties. He wanted to go back to duty but not to return to overseas combat 'right away'. "I don't know whether I will feel shaky when I get into a plane again, but I don't think so."

He was reassured that he was now ready for flying duty and that he knew now what his shakiness in the plane meant: it was his reaction to Mack's death, his identification with Mack, and his feeling of guilt—which really was not necessary. The extension of this fear to other situations, such as elevators, movies, etc. was reviewed with him. He was told not to be discouraged if he felt some initial uneasiness about flying. With his knowledge of the cause of it, he would be able to handle it.

"I have no more fear at all of elevators or movies," he said. "My wife has noticed this improvement, and also I'm much less irritable, and I'm anxious to return to duty."

"You are ready to do so, and should be leaving this week."

## Summary

This report shows the way in which psychotherapy helped a patient who was of normal personality prior to military service, and who did not undergo unusual personal combat stress for an aircrew member, but whose emotionally vulnerable spot was struck by witnessing the catastrophe of his close friend, which paralleled his father's accident. His relation to the pilot who was killed resembled in detail his conflictful feelings about his own father and stimulated feelings hitherto repressed and held back from consciousness. The bringing to light of these emotions, and his realization of how they fitted in with his phobia about automobiles, airplanes and closed-in places, relieved most of his anxiety symptoms and restored his confidence.

The handling of the transference situation played an important part in the dynamics of this patient's improvement. In essence it consisted of the following steps: (1) diminution of guilt feelings by initial reassurance so that the guilt feeling would not interfere with revealing the conflict material. This was a permissive role of the therapist, a relaxing of the relationship of military discipline for the sake of a therapeutic relationship. (2) The therapist, by interpretation and manner, and tone of voice, as the treatment went on, replaced a fearful father figure in the emotional setting of the treatment by a more tolerant and understanding one, and then through the release of anxiety and the abreaction, the patient's repressed conflict material became more accessible—the patient knew he would not be criticised. (3) The attempt of the patient's ego to handle the repressed material consciously instead of constructing defense mechanisms (spread of the phobia), was actively encouraged by the therapist by a cooperative discussion of the fear-provoking material, with the demonstration of the patient's real ability to handle it. Toward the end, the patient really referred to the treatment situation when he discussed the incident in which the Colonel whom he liked told him that they were going on an easy mission, and the Colonel's statement proved to be correct. At this stage the patient indicated that he felt able to begin to master his fear.

N.B. Follow-up study on this patient after he returned to duty was not possible.

# AMNESIA WITH SPONTANEOUS RECOVERY: A CASE REPORT*

By CAPT. K. R. EISSLER, M.C. and CAPT. JACOB SIEGEL, M.C.†

A seventeen and one-half year old trainee was admitted to the Regional Hospital a few days after his arrival at the Infantry Replacement Training Center. He reported having been perfectly well until eleven days prior to admission when he developed a slight, persistent cough which became gradually worse. Due to the excessive coughing he felt soreness in his chest. A fever was detected, allegedly, at which time the patient was sent to the hospital.

Physical examination revealed positive findings of a congested nasal mucosa and moderately injected pharynx. The patient spoke hoarsely, in a whisper, and on auscultation of the lungs moist, coarse rales were heard on inspiration, posteriorly, at the bases. The diagnosis of laryngo-tracheo-bronchitis was made and the patient was put on penicillin therapy, 30,000 units every three hours, besides the usual analgesics, nose drops and cough medicine. On the third day of the penicillin therapy and the fifth day of hospitalization, when he returned from the x-ray department shortly after lunch he dozed off in bed and slept for one and one-half hours. He awoke about 2:30 P.M. and found that he had no idea of who he was or where he was. He was amnesic for remote and recent events.

Physical examination at that time was negative. He had had 450,000 units of penicillin. At no time, from admission into the hospital until discharge, did the patient have any fever.

When the patient became aware of his amnesia, he became greatly upset, fearful and tearful. He was reassured by his physician and told that he would soon recover. After two and one-half days no change had occurred. He became angry and accused the medical officer of having lied to him. He was advised to read all the letters he had received from home to help him recover his memory. Shortly afterwards, he called the physician and announced with great joy that he had regained his full memory. Examination confirmed the fact. He knew his name and serial number, details of his hospitalization and could explain all the names mentioned in the letters.

The following report is based on the material obtained from one psychiatric interview. Though no new aspect of amnesia could be obtained in

* This paper is a shortened form of the original report which was read at the Staff Meeting of the Medical Service at ASF Regional Hospital, Ft. McClellan, Ala., on 21 December 1945.

† ASF Regional Hospital, Fort McClellan, Alabama.

the study of this patient, there was some confirmation of present ideas on the origin and recovery of amnesia which makes it worth while to present the case history.

The term amnesia is used for conditions of variegated psychopathology. It is permissible to say that everybody is amnesic to a certain degree. Not only are our memory functions not prepared to preserve all details of conscious experience in such a way as to keep them accessible to our demand, but very pertinent and significant experiences, perhaps even the most significant experiences, are repressed and cannot be remembered unless special conditions are introduced. Hypnosis or drug narcosis might help in the recovery of some such memories. It is well known that in dreams long forgotten contents may reappear. However, the person who cannot remember such important memories is not aware at all of being amnesic. On the contrary, when attention is called to the probable loss of recollection of those experiences, the subject is usually incredulous. No fear or panic is expressed when the subject finally becomes convinced that he cannot remember an important part of his past life experience.

Then there are clinical instances in which patients who are mainly hysterical, forget experiences which were highly charged emotionally. Again, the subject does not notice the amnesia and is not interested in its recovery. Such amnesias are crude self-defenses against unpleasant impressions and usually can be recovered easily.

The case under discussion was a different type of amnesia. The patient lost the memory of pertinent data pertaining to the very basis of his existence, such as name, age, and his general background. Such data are indispensable to the ego's struggle for self-preservation and discrimination. Whereas in the above mentioned types of amnesia, especially in the hysterical person, a motive can be found specifically for each amnesic content, no such motives can be ascertained for the specific contents of a total amnesia. There was no special motivation for the loss of memory of the patient's name as against that of the names of his siblings. It was a total reaction, a blocking of all the memory contents accumulated up to a certain point in the patient's biography. The temporary loss of one of the most important weapons in man's struggle for self-preservation, survival, achievement of satisfaction and happiness must have been enforced by a conflict pertaining to the total personal configuration.

The patient could remember after recovery that before falling asleep he was preoccupied by thoughts of his girl friend. He had written to her from the reception center asking her to accept his ring. During his hospitalization, one day prior to the onset of the amnesia, he had received a letter containing her negative reply, telling him that she preferred to postpone such decision until a later date. There was no indication of

hostility or unfaithfulness on her side expressed in the letter, but rather the natural cautiousness of the female when abruptly confronted with a situation which to all indications, appears uncertain. The patient, however, felt duped. He had courted the girl for over a year and he had vague ideas about a rival who might have deprived him of his girl's love during the time of his short absence. He felt compelled to doubt the sincerity of the girl's previous love for him. He was certain that he had had no dream during the short sleep preceding the amnesia and he claimed that from the first moment of awakening the state of amnesia was present.

He further could not explain his sudden proposal to the girl after he reached the reception center. He had been her supervisor in a factory and for the first two months he did not get along at all with her. She had a sharp tongue and he tried to embarrass her by assigning her to unpleasant jobs. After two months he suggested that they "bury the hatchet" and asked her out for lunch. It was the first time that he had asked a girl out. From his description, the fact that she wore a uniform seemed to have been of some pertinence. Later, another young man who worked in that group tried to get closer to the patient's girl, but he was rejected by her. The patient took her out to dances and introduced her to his parents. She was well received by his family and his father used to tease him in a friendly, joking way. His father made remarks about marriage but the patient never entertained that idea seriously, feeling that he was too young.

Now he claimed that since being in the Army, he had risen to the situation, had matured, and had concluded that it would be the right thing to do. In view of the short duration of his military service, this can easily be recognized as a rationalization. Something must have seriously troubled him after he left home. Like so many others he tried to establish a situation of emotional security. It certainly was not love which drove him towards an attempt at making his relationship with her a permanent one. He claimed to feel at ease in the new group he had recently joined. He had won $230 in a dice game on his way to camp. He returned thirty dollars to one loser out of pity for the soldier. He wanted to buy the ring with this money and the fifty dollars he had taken with him from home. (Did he want to redeem his aggression against the male group by marriage?) Before he left he told the girl she need not stay at home during his absence, as he did not mind her going out, a privilege he demanded for himself also.

An explanation of the psychodynamic background of the patient's amnesia might have been possible if more had been known about his motivation for volunteering for the Army. He had not yet reached his 18th birthday and could have stayed at home. The patient was unable to give any pertinent reason for his joining the Army. He came from a Catholic family and was reared in a large middle-western city. He left

school after the tenth grade. He worked with his father for one year and suffered a minor accident, which resulted, as he claimed, in a pain in his leg, which prevented him from continuing his truck-driving. He got a job in a defense factory, where he met his girl. In July of the previous year he had an appendectomy and developed a "nervous breakdown" during hospitalization. He was restless, could not sleep and "saw people walking around where no people were," but this condition subsided within one week and he was discharged. He returned to his former work, but became unemployed four months later because the factory closed. Then he enlisted in the Army. The return of an older brother from overseas was impending. There were three older and three younger siblings. One younger brother had died at the age of eight months when the patient was twelve years old. For seven years he was the youngest and when the brother younger than he was born, his parents teased the patient by saying that he would now lose all the privileges he had enjoyed up to then. He received the newly born brother with misgivings but managed to retain his privileged position even after the subsequent birth of other siblings. "I am father's and mother's pet," he boastfully admitted. His next younger brother eventually became his best friend. When his mother became pregnant with the child who died eight months after birth, the patient was bedridden with pneumonia between Christmas and New Year's, two weeks before the delivery of the brother. It is noteworthy that the patient's amnesia occurred shortly before Christmas. It was a family custom that the father moved out of the parental bedroom and slept in the sick child's bed, whereas the child had the privilege of sharing the mother's bed during the time of sickness.

The patient was a voluble person and emotionally alive; he appeared somewhat driven by his affects as if he were in a perpetual hurry. Hence he presented more material than can usually be elicited in one interview. The proximate psychogenic background of his amnesia is fairly recognizable, especially if the sentence in his mother's letter which brought back his memory is considered. She wrote in response to his complaints about Army food: "I wish I could be with you and cook for you."

The immediate precipitating factor was his girl's rejection. The patient was a competitive, ambitious personality as encountered sometimes in the "youngest" sibling. He was accustomed to victory and this resulted probably in a persistent expectation that impulsive desires would be carried to gratification. The previous short psychotic episode following the appendectomy might, superficially viewed, be considered an expression of his inability to accept even temporary defeat and his propensity to develop marked anxiety when facing a reality which does not bow to his wishes. Moreover, sickness, especially respiratory, must have acquired a meaning to him in view of the history of the pneumonia at the age of

twelve. To be sick meant to push his father away from his mother and to gain entrance to her bedroom and this must have been a very critical situation for a youngster whose mother was pregnant with a child who was to die eight months later. Significantly, at the time of the interview, he was under the wrong impression that he was sick with pneumonia before developing the amnesia. Actually, as mentioned above, his diagnosis was laryngo-tracheo-bronchitis. The patient was aware of his feelings of sibling-rivalry and with a modicum of construction it can be assumed that the patient harbored aggressive impulses against the new, yet unborn rival, and established the well-known magic connection between that impulse and the subsequent elimination of the younger sibling.

A fair outline of the psychodynamic background of his state of mind when falling asleep shortly before the onset of amnesia might run as follows: "I suffer from a sickness which once got me close to Mother when I was in danger of losing her love. A rival died shortly after that time. My girl does not want me because a rival robbed me of her love for me." A total amnesia may set in, as N. Lionel Blitzsten* has repeatedly demonstrated, when an aggressive and destructive impulse is on the verge of breaking through, an impulse which is incompatible with the person's ethical standards. A total amnesia may be compared to the instinctive behavior of some animals which stop all movements and feign death when exposed to danger. Thus they try to escape annihilation by faking death in view of a vastly stronger aggressor. In a total amnesia, the ego acts as if a part of it had died. The entire past is blotted out. The intended aggressive impulse is blocked and with it the total life experience. How far back the amnesia may extend probably depends on the intensity and extent of the shunned aggressive impulse.

When this patient returned to his ward, he did not return like the conquering hero of childhood times who defeated father and was received by mother's affection; he returned to a ward where many other patients were treated and no special attention was paid to him. He was deserted by the entire world including his girl and his mother and he was left without any affection. Had it been a conflict restricted to his relationship to the girl he might have awakened with an amnesia for his attempts at marrying her or he might have solved the conflict with an aggressive dream.

It is interesting that in his attempts at self-treatment, the patient established a situation which has been recommended by Blitzsten in the treatment of amnesia, namely, an approach toward the reestablishment of the original pathogenic situation. It is significant that the patient regained full power of his memory when he read in his mother's letter that she would like to be with him and fulfill her maternal duties. This sentence

* Weekly Seminar on Psychoanalytic Psychiatry, Cook County Hospital, Chicago, Ill. 1940–1944.

contains the traumatic situation and its "remedy", in one. It refers to the state of separation and abandonment and simultaneously proffers consolation. This two-fold aspect pointing to the trauma and its opposite ("I am deserted but after all, somebody loves me,") appears to have lent that passage its singular power to undo the amnesia.

Speaking generally, there are two different kinds of memory content. One kind is practically always accessible to us; the other kind might come or go regardless of a person's effort at control. The first recollection of dreams, for example, after the dream night falls into the second category. In the act of recalling a dream for the first time, the ego usually is passive; it is overwhelmed by something that suddenly and unexpectedly appears on the stage of conscious ideation. A careful check of the situation in which the recollection of the dream occurred reveals a meaningful connection between some factors in that situation and the dream, including its dynamic background. Likewise, the reappearance of the patient's lost memory contents occurred spontaneously, suddenly and in block, not piece-meal. In spite of the patient's preceding effort, not a single content had found its way into his consciousness. He had to wait until a propitious constellation accidentally resulted in such a distribution of forces as to remove the barrier which blocked part of his life experience. This was possible as soon as reality offered a content which was related to the complex enforcing the amnesia and which was strong enough to re-establish a connection with the blocked and temporarily repressed contents in his unconscious. Freud has described a similar dynamism in the sudden recollection of a forgotten word.

Another point of interest is the patient's panic and terror caused by the amnesia. If one of the authors is not mistaken, the majority of amnesic patients previously interviewed did not show the degree of perturbation which this patient did. Indeed, the other cases were frightened also but their fright was somewhat repressed and not clinically manifested, whereas, in this patient the loss of memory might have constituted a greater shock to the ego than the impact of the internal conflict. This would be an important factor in the process of spontaneous recovery.

It is difficult and hardly possible with present means of investigation to speculate on the extent to which penicillin might have had its bearing on the amnesic episode. How far his infectious disorder and the treatment involved might have channelized the psychopathology into the specific clinical form of an amnesia, cannot be decided. At the time of the interview the patient urgently demanded to be sent to duty. He hoped to get a Christmas furlough. He desired to go home as he was certain that, were he there personally, he could induce his girl to accept his ring. Could he have been struggling with an impulse to go AWOL before he fell asleep?

# SOME PROBLEMS IN NARCOLEPSY: WITH A CASE REPORT

By NATHAN ROTH, M.D.

Many general reviews[1–13] have appeared in the literature regarding the syndrome of narcolepsy, which is characterized by periods of diurnal sleep and of flaccid paralysis, the latter usually induced by emotional experiences. Disputes as to the nature of the disorder exist and prompt the present case report.

The relationship of narcolepsy to the convulsive disorders has been a matter of controversy for many years. When Gélineau[14] coined the term "narcolepsy" for this syndrome, he "asserted that he had described 'a new species of neurosis' that had nothing to do with epilepsy whatsoever." "Jelliffe was among the earliest . . . to point out that narcolepsy is not a 'disease' per se or a morbus *sui generis*, as Gélineau called it, but a symptom that may occur in a variety of conditions"[7].

Notkin and Jelliffe[7] state that Adie, Redlich, Curschmann and Prange and a few others "have disputed the close relationship to the epilepsies, pointing out that epileptic attacks occur spontaneously while narcoleptic attacks are emotionally determined. This is an erroneous conception; one has only to consider the common 'affect epilepsy' to dispel the notion that epileptic attacks are always spontaneous (Notkin)." Most important are the cases, referred to by these authors, having "a mixture of both narcoleptic and epileptic attacks or with a transition of one form of attacks into the other." Notkin and Jelliffe suggest that the narcolepsies are closely related to the epilepsies. Wilson[6] believed that the narcolepsies resemble the epilepsies in the "periodical recurrence of attack, abrupt onset with or without aura, loss or diminution of consciousness, relatively brief duration," etc. Yet Adie[3] considered narcolepsy to be an idiopathic disease and insisted that it was distinct from epilepsy. According to him, "Epilepsy is hardly the best label for patients with sleep attacks and cataplexy only. No patient with these symptoms has ever become epileptic in the ordinary sense, although some of them have been narcoleptic for twenty, thirty, in one case forty years."

Like Adie, Daniels[1] felt that "in view of its distinctive clinical manifestations and its apparently less serious nature, . . . , it would seem advisable to regard narcolepsy, for the time being at least, as something distinct from epilepsy. That certain states which seem to represent a transition between the two conditions are occasionally encountered no one can deny, but, as Redlich remarked, many diseases have maintained their independence in spite of such transitions. So long as the essential nature of the two conditions remains in the realm of hypothesis, it is better to rely on the results of clinical observation."

In further reference to the relationship between narcolepsy and the epilepsies, Notkin and Jelliffe[7] said, "This relationship may be resolved satisfactorily when more patients have been completely analyzed at the physicochemical, sensorimotor and symbolic levels. Research should be carried

out at all three levels of the integrated individual." This injunction can now be pursued more thoroughly with the modern emphasis on understanding the individual as a whole, with the assignment of appropriate significance to emotional disturbances in the etiology of disease, and with the advent of the electroencephalograph.

Gibbs and Gibbs[15] state that the electroencephalographic "sleep records of narcoleptics are like those of normals except that the decline to a deep level of sleep is more rapid." According to Murphy[5], "The electroencephalographic findings in these cases show little evidence of pathological cerebral dysrhythmia," and "Narcoleptic sleep is indistinguishable in appearance and electroencephalographically from normal sleep." Dynes and Finley[16] found that, "The electroencephalographic technic . . . yields evidence of dissimilarity between narcolepsy and epilepsy. There is nothing in the character of the electrical discharges from the brain of the narcoleptic patient which would link them with the abnormal electrical discharges from the brain of the epileptic patient. . . . In 16 cases of narcolepsy the brain potentials during the narcoleptic attacks were found to resemble those of physiologic sleep. . . . Patterns consistent with epilepsy were not observed in any of these patients, and none of the patterns observed during the narcoleptic attacks could be induced or exaggerated by hyperventilation for a period of two minutes, in contradistinction to the reaction in epileptic patients. . . . In 17 of the 22 cases normal waking patterns occurred. In the remaining 5 cases abnormal waking patterns were present. . . . One might say that those patients showing normal waking electroencephalographic records fall into the 'idiopathic' group, while those showing abnormal waking records are more likely to fit into the 'symptomatic' group."

Of related interest is the report by Rushton[17] of two cases of sleep paralysis, in both of which the electroencephalogram was "essentially normal"; while these patients did not have diurnal sleep attacks, sleep paralysis is a common phenomenon in narcolepsy. Cutting[18] reports four cases of narcolepsy in which the electroencephalogram was normal in all. After reviewing the electroencephalographic and other evidence, Furtado and Valente[12] conclude that narcoleptic sleep is identical with physiologic sleep, and that the epilepsies and narcolepsies are independent entities, the latter conclusion not being invalidated, in their opinion, by the "rare cases in which both conditions appear in the same patient."

Janzen[19] is also of the opinion that the electroencephalographic record of narcoleptic sleep is that of normal sleep, and that narcoleptic patients show no electroencephalographic evidence of convulsive disorders. Cohn and Cruvant[20] reported ten cases afflicted with diurnal, uncontrollable sleep, in five of which "affective stimuli induced cataplectic muscular phenomena," and stated, "In this series of cases inconstant, but definite, abnormalities of the electroencephalogram were observed in the waking state. Moreover, these abnormalities were qualitatively similar to, but quantitatively less prominent than, the electroencephalographic changes commonly associated with the epilepsies. . . . The basic electroencephalograms, taken between intervals of 'sleep', showed no wave pattern characteristic of the narcoleptic syndrome. . . . The abnormal wave forms observed in the majority of the records were similar, in all essentials, to those obtained from

epileptic persons. . . . The 'epileptic' response to hyperventilation was noteworthy in case 9 and in case 10. . . . Since the electroencephalographic abnormalities observed during the interseizure phase of the hypnoleptic (narcoleptic) syndrome appear qualitatively similar to those associated with the epilepsies, it appears that Wilson's concept that the narcoleptic (hypnoleptic) syndrome is a member of the family of epilepsies is confirmed."

These authors did not observe in the electroencephalograms of their patients, the three per second, wave and spike forms typical of petit mal epilepsy. It is evident that there is no unanimity in the electroencephalographic findings in narcoleptic patients in the waking state, and that the electroencephalographic evidence has not, as yet, solved the problem of the relationship of the narcolepsies to the epilepsies.

Another problem which has provoked dissenting opinions is the significance of emotional factors in the pathogenesis of narcolepsy. In the majority of earlier reports the syndrome was thought to be of organic origin, although some cases were thought to be of psychopathologic nature.

Adie[2] said, "most of the cases are mistaken for epilepsy, some for hysteria; it is certainly distinct from both." He felt that, "True narcolepsy is a functional disorder of the nervous system, probably an undue fatigability of nerve cells, in individuals with a peculiar kind of nervous activity that allows excessive responses to emotional stimuli and favours the spread of inhibitions. . . . The pituitary body with the nucleus hypophyseus and adjacent vegetative centres in the floor of the 'tween-brain forms an endocrine-nervous system; . . . narcolepsy is primarily a disorder of this system." Subsequently he said[3], "Narcoleptics do not show hysterical traits more often than other groups in the community; their symptoms cannot be produced by suggestion, and they do not respond to any form of psychotherapeutic treatment."

According to Gill[10], "Such cases are organic, and not, as still described in some textbooks, hysterical. Symptoms produced by suggestion may be superadded, as they may in any organic disease, and may be removed by superficial psychotherapy. There is no case yet on record where the whole picture has been altered or improved materially by psychotherapy, even by deep analysis." Daniels[1] felt that, "One may reasonably doubt . . . that mental and emotional anomalies have any significance so far as the etiology of narcolepsy is concerned. . . ." Brock and Wiesel[21] pointed out "the resemblance of these organically conditioned states to those of hysteria." Murphy[5] concluded that, "Narcolepsy is a borderline syndrome common to cases of both functional and organic brain disease." Wilson[6] gave reasons for disposing of "the contention that in . . . narcoleptic cases any structural impairment, or any more or less permanent abnormal physiological state of the mechanisms concerned, is in existence."

Jelliffe[7] was of the opinion that those cases "in which a most careful examination fails to reveal any definite evidence of involvement of the central nervous system or of any other system of the organism . . . lend themselves . . . to psychodynamic interpretations, and such attacks may be looked on as an expression of psychologic regressive mechanisms." Missriegler[22] reported the case of a young man with attacks of sleep only, in whom "The gradual uncovering of . . . conflicts by psychoanalysis, not

without great resistance on the part of the patient, resulted finally in a complete cure of the narcolepsy and a marked improvement in personality development. . . ." Worster-Drought[23] said that in most cases which are not associated with organic disease, the attack "is initiated by a complex of psychical origin."

Finally, Langworthy and Betz[24] state that idiopathic narcolepsy is a "personality reaction to emotional issues, rather than an organic disease as has formerly been assumed. . . . The narcoleptic syndrome as a neurotic reaction seems similar in many respects to the hysterical reaction. . . . In our experience, these patients have proved responsive to psychotherapy which should provide a fundamental approach to their difficulty." The hitherto expressed opinions of the pathogenesis of the syndrome run the gamut from purely neuropathologic lesions to unalloyed psychogenesis.

The following case report is presented in illustration of the two disputed points outlined above, namely, the relationship of narcolepsy to the convulsive disorders, and the importance of emotional factors in the pathogenesis of narcolepsy.

## Case Report

*History:* The patient was a 36 year old, single, white female, the eldest of five siblings, and the only one still living at home with her aged parents. In the family scene the father occupied a position in the background; for forty years, until his retirement, he had worked as a clerk, was quiet and timid, and seemed to have few interests other than his work and the daily newspapers. The mother was the dominant figure, setting the patterns of behavior for the children, firm in her convictions, and proud of the fact that there were distinguished persons in her family and that her only son was a professional man.

While pleased that her daughter had followed her example in many directions, she regretted that the patient had carried this compliance to extremes. The orderly manner in which the patient kept her dresser drawers was approved of, but her refusal to share soap or a comb with other members of the family was frowned upon. Her preference for the company of professional men was praised, but her requirements for a potential husband were considered too exacting. The mother was devoutly religious, the father had changed his religious affiliations to please the mother, and the patient found her "greatest comfort" in the church.

The patient had always been considered timid, bashful and inhibited. She was "not the type to get into difficulties" in school. All through high school "her trouble was that she would not talk up." Rather than remonstrate with other pupils who wished to copy her work, she would do their work for them. Although she liked to be with people, she had little to say

in a group, and had never had any intimate friends. She had "read books to bring out her personality."

After finishing high school at the age of 17, she attended a business school and then became a secretary. At the time of her examination she had held one position for 18 years, and had missed only three days of work. Despite this exemplary record, she received only a mediocre salary.

The patient had had measles, whooping cough and chicken pox in childhood; she had never been seriously ill, and there were no noteworthy injuries. At the age of 13, during her first menstrual period, she lost consciousness; she was alone at the time, and thinks she was unconscious for a few minutes. During her succeeding menstrual period, she again lost consciousness while in the presence of her father; during this attack there were no tonic or clonic motor phenomena, and no incontinence. There has been no recurrence of these seizures.

She had observed that she could fall asleep more easily than other people during the day time, but she did not attach particular significance to this fact, until her brother drew it to her attention. At work she often had a great deal of difficulty in keeping awake, and could forestall these attacks of diurnal sleep only by keeping herself extremely busy. She was particularly prone to fall asleep after lunch, and diminishing the amount of food she ate did not lessen this tendency. In the evening she often fell asleep in her chair, waking up to find that she had missed the radio program she had intended to hear. She fell asleep while people were talking to her, and often incurred her sister's anger on this account.

At the age of 21 she began to have cataplectic seizures which have occurred six or more times a year. They take place under two sets of circumstances: whenever she laughs heartily over an amusing incident, or when she is intensely interested in hearing or telling a story. During a visit from a favored aunt with whom the patient likes to talk, she had three cataplectic attacks on three successive evenings, while engaged in conversation with this aunt. The attacks begin with a peculiar sensation in the lips and tongue; the tongue becomes "thick" and it is very difficult for her to talk. This is followed by a feeling that her legs will not hold her, and unless she lies down promptly, she falls to the floor. She is unable to prevent these attacks of flaccid paralysis, which last about five minutes. During this time she is perfectly conscious, unable to move any part of her body, knows what is going on about her, and wants to talk but is unable to say anything. There are no sequelae, other than psychological, to the attacks. They have always occurred in the presence of other people, and cause the patient much embarassment. She always attempts to make the seizure look purposeful, as though she had intentionally slumped down in her chair. Once while putting her young nephew to bed, and while

laughing at the antics of the child, she felt an attack coming on; she tried to stay herself from falling by holding on to the crib, but when this was not possible, she tried to act as though she had sat down on the floor because no chair was available. Others, however, always detect the pathological nature of the event.

The patient has had attacks of sleep paralysis which occur only after the diurnal naps. On awaking from such a sleep, she occasionally finds herself unable to move any part of her body, although she is fully conscious. These attacks last, on the average, about five minutes. Her nocturnal sleep is sound, and she says that she is rarely disturbed by dreams.

*Examinational data:* Psychiatric examination revealed a timid, blocked and embarassed woman. Her voice quavered, she was not easily accessible, and it was difficult to elicit information from her. She felt that examination by a psychiatrist carried a stigma with it, and it was only upon her brother's insistence that she had a neurologic disorder of which she need not be ashamed, that she agreed to seek help.

Aside from her concern over the attacks of sleep and muscular powerlessness, she said that she had only one emotional problem. She earnestly desired to get married and have a family but deplored the fact that opportunity for these gratifications was rapidly waning. The church did not approve of her marrying a divorced man, and she was reaching the age at which she could not bear children. Many men had shown her attention, but she had never been able to get interested in any of them. Her sexual life had been extremely inhibited. She said that she had never masturbated. Although she felt that she had powerful sexual urges, she would allow herself to engage in no sexual activity until marriage. She felt that under proper circumstances she could enjoy sexuality, because the Bible tells us to "increase and multiply." When men made advances to her she vigorously discouraged them, and did not feel at ease until they desisted. She was much preoccupied with phantasies of what sexual activity would be like, but tried to stifle these day dreams lest they make her situation worse. She feared that, unless she married, she would have to face the unpleasant eventuality of living alone; she would not live with her brother or sisters, since that would make her feel dependent on them.

The neurologic and psychiatric diagnoses were: narcolepsy and cataplexy; inhibited personality.

Psychologic tests showed a neurasthenic-like condition in an extremely inhibited person. Bodily preoccupations were outstanding, and a paucity of ideation was shown. Some suspiciousness and prudishness were evident. On the Bellevue Scale, the patient obtained an intelligence quotient of 119, 91st percentile, bright normal intelligence range. The scatter was minimal. Attention was undisturbed, while verbal concept formation

was mildly impaired. The diagnostic personality tests showed the widespread inhibition, stereotypy and meagreness of productivity.

Physical examination showed a well developed and well nourished woman, five feet, six and three-quarter inches in height, weighing 134 pounds, in good general health. Neurologic examination was negative, except for tremors of the eyelids, a tonic reaction of the pupils to light, and poor ocular convergence.

Red and white blood cell counts, differential count, and hemoglobin determination gave normal results. The sugar tolerance test showed an unusual curve: the fasting blood sugar level was 93 mgm. %; one-half hour after the ingestion of 100 gms. of glucose, the blood sugar level was 131 mgm. %; one hour, 95 mgm. %; two hours, 147 mgm. %; three hours, 120 mgm. %; four hours, 140 mgm. %; five hours, 93 mgm. %. X-ray of the skull revealed no abnormalities.

*Electroencephalogram:* The report was as follows:

A symmetrical record containing a fair amount of good alpha activity (in long and short runs) interspersed with low-voltage fast activity. Abnormal activity was seen in nearly all leads and occurred in bilaterally symmetrical bursts: a fronto-vertex tracing contained a burst of 10 spike-and-wave complexes of 4 to 6 per second frequency and of about 100 microvolts amplitude, while a simultaneous left central-vertex tracing contains two in-phase spike-and-wave complexes of 40 microvolts; a parieto-occipital tracing contains a 3 second burst of 6 to 8 per second waves with one wave of 4 per second, all of 50 to 75 microvolts. In the apnoeic period following two minutes of hyperventilation two separate four second bursts of 3 per second, 75 to 100 microvolts spike and wave activity appeared in both fronto-indifferent leads, while simultaneously a few 6 per second waves of 50 microvolts appeared in both occipito-indifferent leads. A hypothalamic lead contained no abnormality. On stimulating the right carotid sinus single waves and brief bursts of 3 per second activity appeared in both fronto-occipital tracings; left carotid sinus stimulating produced no effect.

Conclusion: An abnormal record containing paroxysmal discharges of grand mal and petit mal type. No focus was suggested. Right carotid sinus sensitivity was indicated as a trigger mechanism.

## Comment

Like one of the patients with narcolepsy reported by Chodoff[25], this patient had attacks of loss of consciousness, lasting a few minutes, and not accompanied by convulsive movements nor loss of sphincter control. Such attacks are, of course, suggestive of a convulsive disorder. Further indications, adduced by this case, of a relationship between narcolepsy

and the convulsive disorders, are the abnormal patterns in the electroencephalogram. There is evidence of hyperactivity of the carotid sinus reflex, as was observed by Wilson and Watson[26] in cases of narcolepsy. So far as the author has been able to determine, this is the first instance in which the petit mal pattern has appeared in the cortical electrical discharges of a narcoleptic patient. Walker *et al*[27] were able to produce the hump and spike pattern in the electroencephalogram in their experiments on photic driving. It appears that when photic stimuli to the retina take place at a frequency considerably slower than the normal alpha frequency, then the abnormal hump and spike form occurs. The cortex, accustomed to discharging at a certain rate, produces abnormal patterns when driven to discharge at a slower frequency[28]. The wave and spike forms in the electroencephalogram of the patient herein reported can be looked on as the result of the inhibitory processes which were clinically so evident. The diminished frequency of cortical discharge, and the emergence of the abnormal wave and spike form, may well be the physiological concomitants of the emotional inhibition manifested by the patient. It is apparent that at least in some cases of narcolepsy in the waking state, abnormal cortical discharges occur, resembling those seen in the convulsive disorders, and in the present instance, the typical petit mal pattern appeared at times.

In view of the frequency with which the diencephalon and the areas surrounding the third ventricle have been considered by various authors[2, 10, 18, 29, 30] to be the site of origin of the narcoleptic disturbance, it might be thought rather surprising that the hypothalamic lead in this case did not show further electroencephalographic evidence of disordered function. However, Davison and Demuth[31] have shown that injury to certain cortical areas or their connections with the hypothalamus is occasionally the cause of pathologic sleep. For those who believe that dynamic emotional forces play a rôle in the production of the narcoleptic attack, and they must certainly be in the majority, the theory that the sleep disturbance arises in the cerebral cortex is in conformity with the view that the narcoleptic seizure is mediated, at least in part, through psychologic and emotional events. Worster-Drought[23] says that, "Of those cases of narcolepsy which are independent of organic disease and which might be termed 'functional,' the cases I have encountered lead me to believe that there are several varieties, each corresponding with a different psychological level ranging from superficial to deep until a form is reached, the reaction of which occurs at a purely physiological level." He considers some of the varieties of narcolepsy to be forms of conversion hysteria, and compares others to the "psychasthenic convulsions of Oppenheim or the compulsion neuroses." Levin[32], too, was of the opinion that cortical dysfunction released the

narcoleptic symptoms. He said: "The attacks of sleep of narcolepsy occur with significant frequency under conditions duplicating those which in Pavlov's experiments elicited sleep and other manifestations of cerebral inhibition. This, together with other evidence, suggests that narcolepsy results from a disturbance (in the cerebral cortex or elsewhere) which renders the cortex unduly exhaustible or 'inhibitable', the attacks of sleep arising from inhibition of the whole cortex and the attacks of flaccid paralysis from inhibition of just the motor cortex (plus, probably, certain subcortical motor centers as well)."

The patient reported above could not resolve her emotional conflicts, which brought her to such an impasse that she led a markedly inhibited life. Levin[33] commented on "the tendency of narcoleptics to fall asleep when faced by unpleasant situations from which they would like to, but cannot or dare not, escape. Langworthy and Betz[24] stated: "Patients showing the narcoleptic syndrome have in common a characteristic background of emotional conflict. They feel caught in a life-pattern to which they are expected to conform, but which they deeply resent. They become motivated by a need for autonomy and for self-differentiation along the lines of some alternative life-pattern of their own choosing. They are frustrated in their efforts to achieve this, because of the actual psychological ties which bind them to the life-pattern which they feel impelled to reject. In the tensions of the resulting emotional dilemma, the narcoleptic symptoms appear."

This concept of the psychogenesis of narcolepsy is borne out by the facts of the case reported herein. The identification with the aggressive, overly religious and compulsive mother determined the patient's patterns of behaviour. The hostility in this identification was apparent in the fact that the patient carried out her mother's precepts to such extreme degree that even the mother was annoyed. The patient was frustrated by the orderly routine of her daily life and by the too literal application of religious teachings. Yet, shackled by the strong attachment to her mother, she could not break her bonds and escape into the marital release she desired. It was at the time, in early adult life, when the desire to escape from this situation became prominent, that the narcoleptic symptoms made their appearance.

## Summary and Conclusions

1) A case report of a patient with narcolepsy and cataplexy is presented, the pathogenesis of which is attributed to the emotional conflicts of the patient.

2) The psychologic processes have their neurophysiologic counterparts,

as detected in the electroencephalographic record and in the clinical symptoms.

3) This is the only case of narcolepsy so far reported in which a petit-mal pattern appeared in the cortical cerebral discharges.

4) At least in some cases of narcolepsy, there are neurophysiologic similarities to the convulsive disorders.

## REFERENCES


1. Daniels, L. D.: Narcolepsy, *Medicine*, 13: 1, 1934.
2. Adie, W. J.: Idiopathic Narcolepsy: A Disease Sui Generis; With Remarks on the Mechanism of Sleep, *Brain*, 49: 257, 1926.
3. ———: The Clinical Features of Idiopathic Narcolepsy, *Practitioner*, 125: 288, 1930.
4. Levin, M.: Narcolepsy (Gélineau's Syndrome) and Other Varieties of Morbid Somnolence, *Arch. Neurol. & Psychiat.*, 22: 1172, 1929.
5. Murphy, W. F.: Narcolepsy, a Review and Presentation of Seven Gases, *Am. J. Psychiat.*, 98: 334, 1941.
6. Wilson, S. A. K.: The Narcolepsies, *Brain*, 51: 63, 1928.
7. Notkin, J., and Jelliffe, S. E.: The Narcolepsies, Cryptogenic and Symptomatic Types, *Arch. Neurol. & Psychiat.*, 31: 615, 1934.
8. Cozby, H. O.: Narcolepsy, with Report of Three Cases, *U. S. Nav. M. Bull.*, 34: 471, 1936.
9. Lehrman, S. R., and Weiss, E. J.: Schizophrenia in Cryptogenic Narcolepsy, Report of a Case, *Psychiatric Quart.*, 17: 135, 1943.
10. Gill, A. W.: Idiopathic and Traumatic Narcolepsy, *Lancet*, 1: 474, 1941.
11. Harper, F. T.: Narcolepsy, With Report of Four Cases, *North Carolina M. J.*, 6: 96, 1945.
12. Furtado, D., and Valente, F. E. P.: A Case of Narcolepsy with Oneiric Manifestations, *J. Ment. Sc.*, 90: 538, 1944.
13. Camp, C. D.: Morbid Sleepiness, with a Report of a Case of Narcolepsy and a Review of some Recent Theories of Sleep, *Jour. Abnorm. Psychol.*, 2: 9, 1907.
14. Gelineau: Quoted by Adie (2).
15. Gibbs, F. A., and Gibbs, E. L.: *Atlas of Electroencephalography*. Cambridge, Mass., Lew A. Cummings Co., 1941.
16. Dynes, J. B., and Finley, K. H.: The Electroencephalograph as an Aid in the Study of Narcolepsy, *Arch. Neurol. & Psychiat.*, 46: 598, 1941.
17. Rushton, J. G.: Sleep Paralysis: Report of Two Cases, *Dis. Nerv. System*, 5: 115, 1944.
18. Cutting, W. C.: The Coexistence of Obesity and Narcolepsy, *Stanford Med. Bull.*, 2: 172, 1944.
19. Janzen, R.: Hirnbioelektrische Untersuchungen über den physiologischen Schlaf und den Schlafanfall bei Kranken mit genuiner Narkolepsie, *Deutsche Ztschr. f. Nervenh.*, 149: 93, 1939.
20. Cohn, R., and Cruvant, B. A.: Relation of Narcolepsy to the Epilepsies, A Clinical-Electroencephalographic Study, *Arch. Neurol. & Psychiat.*, 51: 163, 1944.
21. Brock, S., and Wiesel, B.: The Narcoleptic-Cataplectic Syndrome—An Ex-

cessive and Dissociated Reaction of the Sleep Mechanism—And Its Accompanying Mental States, *J. Nerv. & Ment. Dis.*, 94: 700, 1941.

22. Missriegler, A.: On the Psychogenesis of Narcolepsy: Report of a Case Cured by Psychoanalysis. An Epitomized Rendition into English, by Ben Karpman, *J. Nerv. & Ment. Dis.*, 93: 141, 1941.
23. Worster-Drought, C.: Narcolepsy, *Brit. J. M. Psychol.*, 3: 267, 1923.
24. Langworthy, O. R., and Betz, B. J.: Narcolepsy as a Type of Response to Emotional Conflicts, *Psychosom. Med.*, 6: 211, 1944.
25. Chodoff, P.: Sleep Paralysis, with Report of Two Cases, *J. Nerv. & Ment. Dis.*, 100: 278, 1944.
26. Wilson, D. C., and Watson, R. F.: Narcolepsy, with Special Reference to the Carotid Sinus Reflex, *South. M. J.*, 27: 754, 1934.
27. Walker, A. E., Woolf, J. I., Halstead, W. C., and Case, T. J.: Photic Driving, *Arch. Neurol. & Psychiat.*, 52: 117, 1944.
28. Halstead, W. C.: Personal communication.
29. Palmer, H. A.: Narcolepsy, *Brit. M. J.*, 478 (Oct. 4) 1941.
30. Dynes, J. B.: Narcolepsy and Cataplexy, *Lahey Clin. Bull.*, 2: 83, 1941.
31. Davison, C., and Demuth, E. L.: Disturbances in Sleep Mechanism: A Clinicopathologic Study, *Arch. Neurol. & Psychiat.*, 53: 399, 1945.
32. Levin, M.: Diplopia in Narcolepsy, *Arch. Ophth.*, 29: 942, 1943.
33. ———: Mental Symptoms in Narcolepsy, *Am. J. Psychiat.*, 98: 673, 1942.

## BOOK NOTICES

*Modern Attitudes in Psychiatry; The March of Medicine, 1945.* Number X of The New York Academy of Medicine Lectures to the Laity. Price $2.00. Pp. 154. New York, Columbia University Press, 1946.

For ten years The New York Academy of Medicine has arranged for a series of lectures to the laity each year. For 1945 this series of lectures was appropriately devoted entirely to psychiatry. An excellent historical sketch of psychiatry was given in two lectures by Iago Galdston of The New York Academy, and Dr. James H. Wall of The New York Hospital. Canby Robinson of the American Red Cross discusses the social aspects of illness; General William C. Menninger, military aspects of psychiatry; and Edward Weiss of Philadelphia, the use of psychotherapy in general practice. Franz Alexander contributes a chapter on present trends and the future outlook.

In the opinion of the reviewer, the historical lectures and the discussion of military psychiatry are the best chapters, but the whole book is interesting, lucid and informative—well adapted for lay reading, but good for doctors, too. (K.A.M.)

*Rehabilitation—Its Principles and Practice.* Revised and Enlarged Edition. By JOHN EISELE DAVIS. Price $3.00. Pp. 260. A. S. Barnes & Co., Inc., N. Y., 1946.

"A new psychology of rehabilitation is needed, an aggressive psychology away from the defensory custodial ideals typified in the old hospital system. . . ." For better understanding of this "new psychology" the author has presented, almost in textbook form, a survey of theories applying to the total job of rehabilitation in the field of mental illness from the approach of the psychiatrist, the physician, the psychologist, and the various kinds of occupational and recreational therapists.

At a time when much is needed in the way of sound orientation to the job of rehabilitation, this book should be of considerable interest. Not only does it view rehabilitation theory as a dynamic moving thing that must operate in line with the immediate social interrelationships of a society, but it stresses the needs of the individual as primary. On an educational level, the author holds out to society the need for fostering affection of workers for employers as a means of assisting sublimation of aggressive impulses; and for the rehabilitator specific methods of rehabilitation are discussed and documented by quotations from experienced persons in the field. Frequent case reports are presented with a plea for the need of greater dynamic understanding of the various types of illness. (Annette Renaud.)

*Hypnoanalysis.* By LEWIS R. WOLBERG. Price $4.00. Pp. 360. New York, Grune and Stratton, 1945.

This discussion of "hypnoanalysis" is probably the best work on the subject thus far published. Although in his techniques Doctor Wolberg is bold and imaginative, his conclusions are cautious and eminently reasonable.

The book consists of two major sections: (1) The presentation of an illustrative case with a case analysis by A. Kardiner; (2) Chapter discus-

sions of the problems of transference, resistance, interpretations, etc., in hypnoanalysis. Perhaps one of the weakest points about this volume is the fact that the discussion of transference, resistance, interpretation, and so on, is really not specific to hypnoanalysis. It is as if an attempt were made to combine a discussion of hypnoanalysis with the more general problems of technique in psychoanalysis. Although the problems are often very much the same, one would hope to hear more pointedly from such a presentation the crucial differences between the two rather than their similarities.

In an area of investigation where there is such a plethora of either exceedingly dull or exceedingly irresponsible presentations, it is a relief to read an account which in spite of its many limitations is an honest and modest statement. (M. Brenman.)

*The Biology of Schizophrenia.* By R. G. HOSKINS. Price $2.75. Pp. 191. New York, W. W. Norton & Co., 1946.

This book is a concise report on the results of 18 years research by a competent team of investigators led by the author, in connection with the Worcester State Hospital. The author's approach to the problem is primarily biological. The first lecture is an introduction into modern theory of knowledge. Hoskins follows the theory of "emergence" in biology, investigating the different "emergent levels"—molecular, cellular, glandular, homeostatic, finally to reach the level of personality integration. Hoskins and his co-workers found a significant sluggishness of adaptation to the internal and external environmental stresses in schizophrenia. Among other things this expresses itself in reduced oxygen uptake of the tissues, in vestibular impairment, disturbed utilization of certain hormones and vitamins. The otherwise elastic adjustments of homeostasis become in schizophrenia at times "robot like". The ultimate location of all the disturbances of vegetative equilibrium in schizophrenia might be caused by enzymic changes in the hypothalamus. However, the crucial question whether similar vegetative maladjustments could also be caused by psychogenic factors or not remains unanswered. In maturity, the pernicious lack of self-esteem and of empathizing ability are stressed as the outstanding aspects of the schizophrenic personality.

It is a pity the author felt it necessary to slash out against psychoanalysis, conceding however, its indispensability for the psychological understanding of schizophrenia.

The therapeutic suggestions for further research contained in this book are most challenging and stimulating. It is recommended for everyone interested in the problem. (Jan Frank.)

*The New Veteran.* By CHARLES G. BOLTE. Price $2.00. Pp. 212. New York, Reynal & Hitchcock, 1945.

This book describes the beginnings, the ideals, the purposes of a group of veterans which may become one of national importance. It is the only veterans organization which adheres to completely democratic plans of membership and administration; for example, it draws no color line in its units. Mr. Bolte lost a leg in the African campaign and during his convalescence began to think about the problems of re-assimilation when he and his companions returned home. He thought bravely, clearly, and constructively. (K. A. M.)